

## Congestive Heart Failure in Persons Living With HIV: Are we providing standard of care?

### **Authors:**

Salil Chowdhury, Jung Seo MD, Diana Finkel DO, Steven Keller Ph.D.

Rutgers New Jersey Medical School, Department of Medicine

### **Background**

With antiretroviral therapy, Human Immunodeficiency Virus (HIV) infection has become a life-long chronic condition that patients can live with. Persons Living with HIV (PLWH) have increased risk of cardiovascular diseases including congestive heart failure (CHF) and increased morbidity and mortality from these diseases due to factors such as HIV-induced chronic inflammation. This study will assess if providers at University Hospital in Newark, NJ are providing standard of care for CHF in PLWH.

### **Methods:**

This study was approved by Rutgers IRB (Pro2020000391). A database of 154 charts including all patients with diagnoses of both HIV and CHF was generated using ICD-10 codes for HIV and CHF. After screening, 79 patient charts were eligible. Patients were excluded if their CHF was managed elsewhere, if they were misdiagnosed or deceased. Nine charts were diagnosed with heart failure with preserved ejection fraction (HFpEF) and 70 with heart failure with reduced ejection fraction (HFrEF). Their treatment was assessed using American College of Cardiology (ACC)/American Heart Association (AHA) guidelines.

### **Results:**

In terms of HFrEF for patients requiring aldosterone antagonists, 6/60 eligible patients were not prescribed aldosterone antagonists due to an incorrect contraindication. For patients requiring consideration for device therapy, 14/37 patients were not considered. Patients should be managed based on NYHA/ACC/AHA class, but 10/70 patients did not have class documented. Three additional charts were found to not follow class-based management. For patients with hypertension, 17/49 patients did not have guideline-based titrated therapy. In terms of HFpEF, 2/9 patients were incorrectly prescribed nitrates, spironolactone or ARBs and 3/7 patients did not have proper hypertension treatment.

### **Conclusion:**

Adherence to evidence-based guidelines for CHF in PLWH is important due to their increased risk of mortality and morbidity. Improvements such as documentation of heart failure class, contraindications to medications, and consideration for devices may improve outcomes going forward.